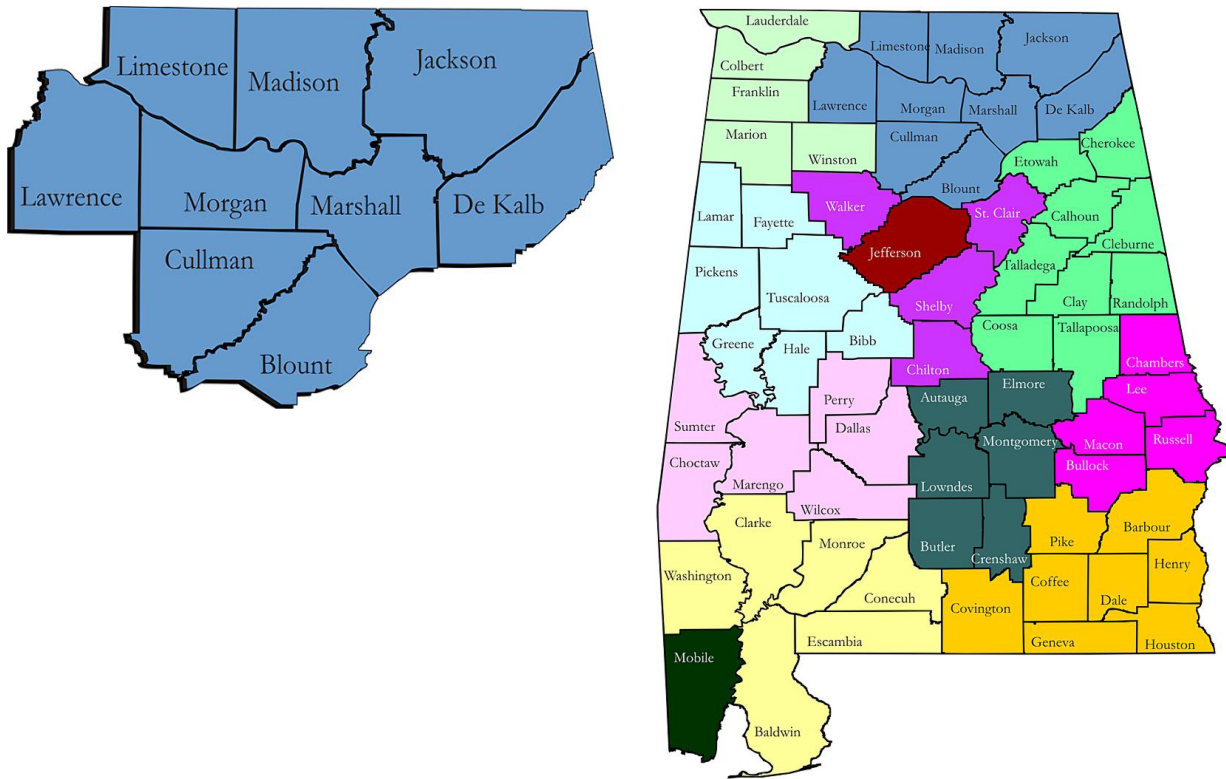


WIAA Region 2 Workforce Report



Summary

- Region 2 had a low 3.8 percent unemployment rate in August 2005, with 16,260 unemployed. However, the nine-county region has a large 106,700-strong available labor pool that is looking for better jobs and includes 90,470 underemployed workers. The underemployed are willing to commute farther and longer; for the one-way commute, 39 percent are prepared for 20 or more minutes longer and also for 20 or more extra miles.
- In 2000, 33,240 residents commuted out of the region for work, compared to 31,310 in-commuters. Significant commuting within the region suggests that the roads and highways must be maintained properly to ensure uninterrupted movement of workers as impeded movement of workers can slow economic development.
- Educational attainment in the region is slightly better than for the state as a whole mainly because of Madison County's high level. Of the age 25 and over population, Alabama has 75 percent high school graduates and 19 percent bachelor's or higher degree holders, compared to 76 percent and 20 percent, respectively, for the region.
- Employment is currently growing faster than the labor force and population. This can intensify in-commuting and presents a challenge to workforce development. Initiatives that address this

challenge might consider (i) focusing on hard-to-serve populations (e.g. out-of-school youth and illiterate adults), (ii) facilitating in-commuting, and (iii) helping communities gain new residents, especially since increasing the number of residents is generally more beneficial to communities than in-commuting. However, communities must be prepared to invest in amenities and infrastructure to support population growth. Hard-to-serve populations are often outside of the mainstream economy, poor, and have difficulty finding work. They are potential labor force participants and some investment in training, transportation, child care, infrastructure, etc. may be needed to tap this resource.

- By sector, the top five employers in the region are manufacturing, retail trade; health care and social assistance; professional, scientific, and technical services; and accommodation and food services. These five industries provided 211,670 jobs, 63 percent of the region total in the second quarter of 2004. Two of these leading employers—manufacturing and professional, scientific, and technical services—had higher average monthly wages than the \$2,785 regional average.
- On average about 18,000 jobs were created per quarter from second quarter 2001 to second quarter 2004; quarterly net job flows averaged 1,426. Job creation is the number of new jobs that are created either by new area businesses or through expansion of existing firms. Net job flows reflect the difference between current and previous employment at all businesses.
- Six occupations are both high-demand and fast-growing: Computer Software Engineers, Applications; Security Guards; Receptionists and Information Clerks; Packers and Packagers, Hand; Nursing Aides, Orderlies, and Attendants; and Registered Nurses. The top five high-demand occupations are Cashiers; Retail Salespersons; Combined Food Preparation and Serving Workers; Laborers and Freight, Stock, and Material Movers, Hand; and Waiters and Waitresses. The top five fast-growing occupations are Medical Assistants; Medical Records and Health Information Technicians; Home Health Aides; Personal and Home Care Aides; and Network Systems and Data Communications Analysts.
- The top 50 highest earning occupations are mainly in health, legal, management, engineering, computer, science, and postsecondary education fields. The top four are all health occupations (e.g. Internists, General). Almost all high-earning occupations require bachelor's or higher degrees. Computer Software Engineers, Applications is the one occupation that is in high-demand, fast-growing, and high-earning.
- Fast-growing or high-demand occupations are generally not high-earning. Of 40 selected high-demand, 42 selected fast-growing, and 50 selected high-earning occupations—Computer Software Engineers, Applications—is the only one in high-demand, fast-growing, and high-earning. General and Operations Managers is both high-earning and in high-demand. Sales Managers, Pharmacists, and Internists, General are the fast-growing and high-earning occupations.
- The most relevant skills for high-demand and fast-growing occupations are basic: active listening, reading comprehension, speaking, writing, and service orientation. High-demand and high-growth occupations are also common to the leading employment sectors. Economic

development should aim to diversify and strengthen the region's economy by retaining, expanding, and attracting more high-wage providing industries.

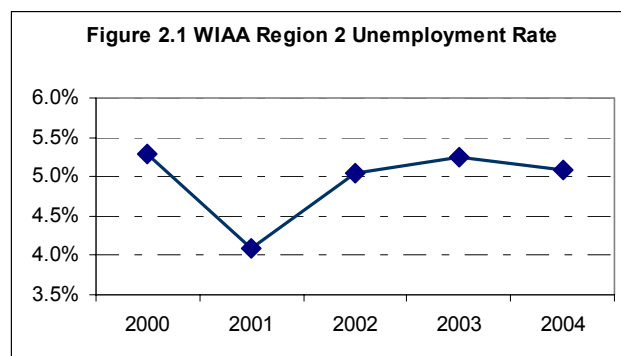
- The finding that basic skills are important—for high-demand, high-growth, and high-earning jobs—indicates a strong need for training in these skills. Ideally, all high school graduates should possess basic skills so that postsecondary and higher education can focus on other and more complex skills as well as enhancing these basic skills. Employers should be an integral part of planning for training as they can help identify future skill needs and any existing gaps.
- Skill and education requirements for jobs keep rising. These facts strongly emphasize the need to raise educational attainment in the region and present challenges to workforce development. They also present opportunities for economic development through workforce development activities that involve postsecondary and higher education institutions. Higher incomes to graduates from these institutions would help to raise personal income for the region. Raising personal income by improving educational attainment is an effective economic development strategy for the region. It will complement the region's higher than Alabama population growth rate, since employment is growing faster than the labor force.
- A highly educated and productive workforce is a critical economic development asset. Together, workforce development and economic development can provide this asset and build a strong well-diversified regional economy. Indeed, one cannot achieve success without the other.

Workforce Supply

Labor Force Activity

The labor force includes all persons in the civilian noninstitutional population who are age 16 and over and who have, or are actively looking for, a job. Typically, those who have no job and are not looking for one are not included (e.g. students, retirees, and the disabled). Table 2.1 shows labor force information for Region 2 and its nine counties for 2004 and August 2005. Larger increases in the number of employed residents relative to labor force size lowered unemployment rates in 2005. The labor force shrank in four counties—Cullman, DeKalb, Jackson, and Morgan.

Unemployment rates in 2004 ranged between 4.0 percent and 6.7 percent for the counties, with 5.1 percent for the region. The unemployment range in August 2005 was 3.2 percent to 5.2 percent, with a 3.8 percent rate for the region. Five counties had higher unemployment rates than the state's 4.2 percent. Annual unemployment rates for 2000 to 2004 are shown in Figure 2.1. The region's unemployment dropped to 4.1 percent in 2001, rose to 5.3 percent in



Source: Alabama Department of Industrial Relations.

2003, but has been falling since with improvements in employment.

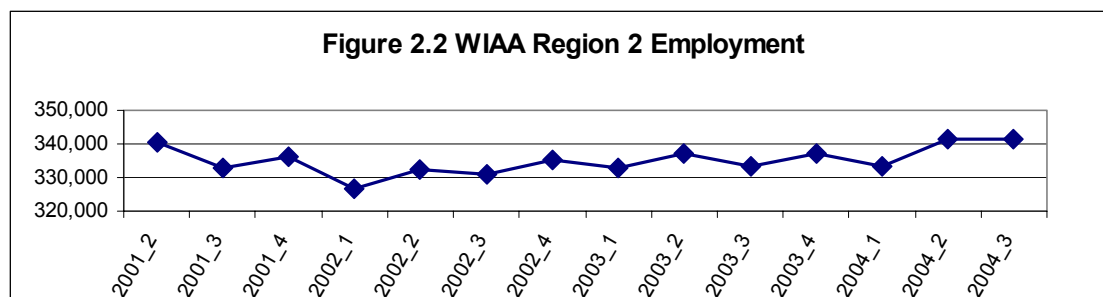
Employment in the region averaged 335,100 quarterly from the second quarter of 2001 to third quarter 2004 (Figure 2.2). The low point was recorded in the first quarter of 2002 but employment is clearly recovering with increasing economic activity. Employment refers to the number of full-time and part-time jobs.

Table 2.1 WIAA Region 2 Labor Force Information

	2004			
	Labor Force	Employed	Unemployed	Rate
Blount	26,179	25,127	1,052	4.02%
Cullman	38,666	36,703	1,963	5.08%
DeKalb	32,257	30,438	1,819	5.64%
Jackson	27,264	25,425	1,839	6.75%
Lawrence	16,121	15,092	1,029	6.38%
Limestone	34,733	32,990	1,743	5.02%
Madison	158,016	150,930	7,086	4.48%
Marshall	41,587	39,594	1,993	4.79%
Morgan	56,085	52,694	3,391	6.05%
WIAA Region 2	430,908	408,993	21,915	5.09%
Alabama	2,148,766	2,029,314	119,452	5.56%
U.S.	147,401,000	139,252,000	8,149,000	5.53%

	2005 August			
	Labor Force	Employed	Unemployed	Rate
Blount	26,205	25,362	843	3.22%
Cullman	38,143	36,740	1,403	3.68%
DeKalb	31,880	30,465	1,415	4.44%
Jackson	27,048	25,793	1,255	4.64%
Lawrence	16,203	15,357	846	5.22%
Limestone	35,471	33,940	1,531	4.32%
Madison	160,371	155,279	5,092	3.18%
Marshall	41,905	40,387	1,518	3.62%
Morgan	55,976	53,618	2,358	4.21%
WIAA Region 2	433,202	416,941	16,261	3.75%
Alabama	2,155,745	2,065,528	90,217	4.18%
U.S.	150,469,000	143,142,000	7,327,000	4.87%

Source: Alabama Department of Industrial Relations and U.S. Bureau of Labor Statistics.



Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

Commuting Patterns

In 2000, 1,930 more people commuted into the region for work than commuted out (Table 2.2). There was significant commuting within the region as well.

Table 2.2 also shows the one-way average commute time and distance for workers in 2004; the data was collected as part of a survey on underemployment. The one-way commute takes less than 20 minutes for 59 percent of resident workers; between 20 and 40 minutes for 28 percent; and more than 40 minutes for 10 percent. About 1 percent of workers take more than an hour.

The commute is less than 10 miles for 46 percent of workers and roughly 32 percent travel 10 to 25 miles. About 18 percent of workers travel more than 25 miles one-way, with nearly 5 percent exceeding 45 miles. This commuting data suggest that roads and highways must be maintained properly to ensure uninterrupted movement of workers so as to not slow economic development.

Table 2.2 WIAA Region 2 Commuting Patterns

Area	Inflow, 2000		Outflow, 2000	
	Number	Percent	Number	Percent
Blount	9,826	29.6	11,123	35.5
Cullman	1,782	5.4	4,415	14.1
DeKalb	2,376	7.2	3,089	9.9
Jackson	1,346	4.1	3,768	12.0
Lawrence	1,449	4.4	1,244	4.0
Limestone	2,375	7.2	1,536	4.9
Madison	6,977	21.0	2,926	9.4
Marshall	4,771	14.4	2,100	6.7
Morgan	2,338	7.0	1,109	3.5
WIAA Region 2	33,240	100.0	31,310	100.0
<p>Average commute time (one-way), 2004</p> <p>Percent of workers</p> <p>Less than 20 minutes 59.0</p> <p>20 to 40 minutes 28.0</p> <p>40 minutes to an hour 8.6</p> <p>More than an hour 1.3</p> <p>Average commute distance (one-way), 2004</p> <p>Percent of workers</p> <p>Less than 10 miles 46.2</p> <p>10 to 25 miles 31.6</p> <p>25 to 45 miles 13.1</p> <p>More than 45 miles 4.7</p>				

Note: Rounding errors may be present.

Source: U.S. Census Bureau and Alabama Department of Industrial Relations.

Population

The Region 2 population estimate of about 849,800 for 2004 is 4.0 percent more than was recorded for 2000 (Figure 2.3 and Table 2.3). DeKalb County led population growth with 7.8 percent, but Blount and Limestone counties lost some residents. The region's population is projected to grow 13 percent in this decade to about 923,500 by 2010. Population growth will be fastest in DeKalb County and slowest in Limestone. If employment growth continues its fast pace, it could intensify the net in-commuting. Communities that experience rapid job gains may need to consider investments in amenities and infrastructure to attract new residents.

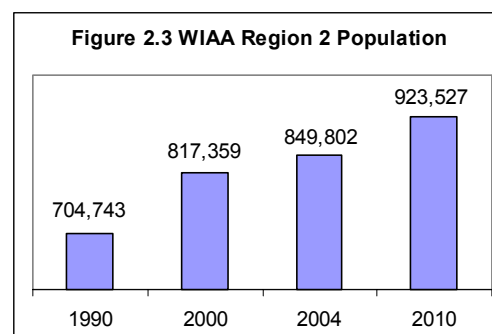


Table 2.3 WIAA Region 2 Population

	1990 Census	2000 Census	2004 Estimate	% Change 2000-2004	2010 Projected	% Change 2000-2010
Blount	47,796	53,926	53,821	-0.2	59,104	9.6
Cullman	54,651	64,452	66,935	3.9	75,408	17.0
DeKalb	39,248	51,024	54,988	7.8	63,715	24.9
Jackson	70,832	82,231	84,781	3.1	94,319	14.7
Lawrence	67,613	77,483	79,189	2.2	86,982	12.3
Limestone	31,513	34,803	34,418	-1.1	37,378	7.4
Madison	54,135	65,676	69,387	5.7	76,638	16.7
Marshall	238,912	276,700	293,072	5.9	309,616	11.9
Morgan	100,043	111,064	113,211	1.9	120,367	8.4
WIAA Region 2	704,743	817,359	849,802	4.0	923,527	13.0
Alabama	4,040,587	4,447,100	4,530,182	1.9	4,838,812	8.8
U.S.	248,709,873	281,421,966	296,655,404	5.4	314,571,000	11.8

Source: Center for Business and Economic Research, The University of Alabama and U.S. Census Bureau.

Educational Attainment

Educational attainment of Region 2 residents who are 25 years old and over is shown below in Table 2.4 and Figures 2.4 and 2.5. Seventy-six percent graduated from high school and about 20 percent hold a bachelor's or higher degree. Madison County stands out with 85 percent high school graduates and 34 percent bachelor's or higher degree holders. Educational attainment is important as skills rise with education and high wage 21st century jobs demand more skill sets.

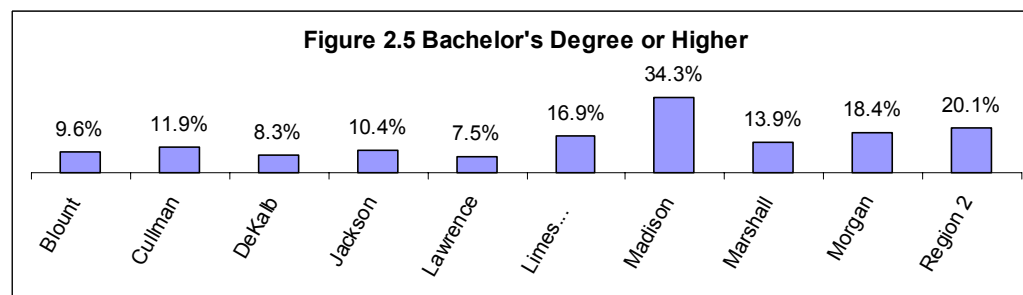
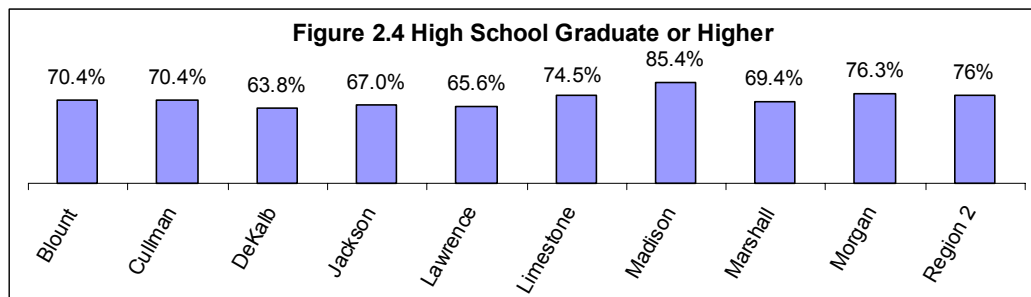


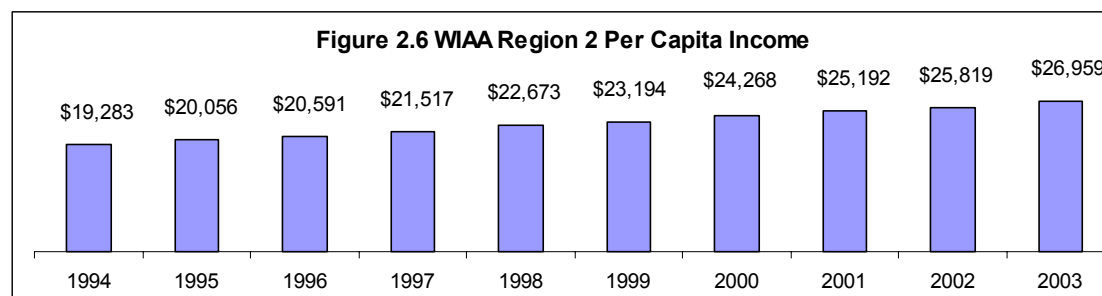
Table 2.4 Educational Attainment in 2000, Population 25 Years and Over

	Blount	Cullman	DeKalb	Jackson	Lawrence	Limestone	Madison	Marshall	Morgan	Region 2
Total	33,702	51,787	42,740	36,435	22,894	43,456	180,389	54,961	73,331	539,695
No schooling completed	526	452	826	521	281	357	1,152	691	875	5,681
Nursery to 4th grade	308	403	610	456	220	408	801	607	545	4,358
5th and 6th grade	1,272	1,537	1,611	1,213	779	1,152	2,006	1,794	1,369	12,733
7th and 8th grade	1,620	3,398	3,110	2,572	1,558	2,059	4,430	3,400	3,169	25,316
9th grade	1,695	2,882	2,766	2,194	1,332	1,761	4,099	2,882	2,746	22,357
10th grade	1,986	2,724	2,928	2,082	1,623	2,091	4,989	3,127	3,335	24,885
11th grade	1,428	2,290	1,875	1,813	1,274	1,859	4,477	2,465	2,719	20,200
12th grade, no diploma	1,125	1,636	1,743	1,155	805	1,394	4,354	1,879	2,589	16,680
High school graduate/equivalent	12,136	16,584	14,549	12,707	9,029	14,102	39,591	16,758	22,252	157,708
Some college, less than 1yr	2,332	3,758	2,595	2,249	1,272	2,968	12,372	3,616	5,608	36,770
Some college, 1+ yrs, no degree	3,944	6,469	4,588	3,790	2,149	5,861	29,277	7,022	10,429	73,529
Associate degree	2,095	3,492	2,011	1,885	849	2,095	11,027	3,081	4,205	30,740
Bachelor's degree	1,972	3,845	2,095	2,400	1,159	5,166	40,961	4,997	9,287	71,882
Master's degree	893	1,660	1,059	1,023	392	1,705	15,894	1,948	3,203	27,777
Professional school degree	247	527	278	284	147	270	2,569	489	682	5,493
Doctorate degree	123	130	96	91	25	208	2,390	205	318	3,586

Source: Center for Business and Economic Research, The University of Alabama and U.S. Census Bureau.

Per Capita Income

Per capita income (PCI) in Region 2 was at \$26,959 in 2003 (Figure 2.6), up by about 40 percent from 1994, and \$454 or 2 percent higher than the Alabama average of \$26,505. Madison County had the highest PCI with \$31,797, about \$5,300 above the state average. Blount County had the lowest PCI with \$21,623.



Source: U.S. Bureau of Economic Analysis and Center for Business and Economic Research, The University of Alabama.

Underemployment and Available Labor

Labor force data are often limited to information on the employed and the unemployed that is available from government sources. However, this information is not complete from the perspective of employers. New or expanding employers are also interested in underemployment

because current workers are potential employees. In fact, experience requirements in job ads are evidence that many prospective employers look beyond the unemployed for workers.

Workers in occupations that underutilize their experience, training, and skills are underemployed. These workers might look for other work because their current earnings are below what they believe they can get or because they wish to not be underemployed. Underemployment occurs for various reasons including (i) productivity growth, (ii) spousal employment and income, and (iii) family constraints or personal preferences. The various contributing factors combined with economic, social, and geographic characteristics of areas make underemployment unique to areas.

The existence of underemployment identifies economic potential that is not being realized. It is extremely difficult to measure this economic potential because of uncertainties regarding additional income that the underemployed can bring to an area. It is clear, however, that underemployment provides opportunities for selective job creation and economic growth. A business that needs skills prevalent among the underemployed could locate in WIAAs with such workers regardless of those areas' unemployment rates. A low unemployment rate, which may falsely suggest limited labor availability, is not a hindrance to the business.

The underemployed present a significant pool of labor because they tend to respond to job opportunities that they believe are better for reasons that include (i) higher income, (ii) better benefits, (iii) better terms and conditions of employment, and (iv) better match with skills, training, and experience. The underemployed also create opportunities for entry level workers as they leave lower-paying jobs for better-paying ones. Even if their previously held positions are lost or not filled (perhaps due to low unemployment), there is economic growth in gaining higher-paying jobs. Such income growth boosts consumption, savings, and tax collections. Quantifying the size of the underemployed is a necessary first step in exploiting it for economic development, workforce training, planning, and other uses.

WIAA Region 2 had an underemployment rate of 21.7 percent in 2004. Applying this rate to August 2005 labor force data means that about 90,476 employed residents were underemployed (Table 2.5). Adding the unemployed gives a total available labor pool of about 106,700 for the region. This pool is about 6.5 times the number of unemployed and is a more realistic measure of the available labor in the region. However, prospective employers must be prepared to offer the underemployed higher wages, better terms of employment, or some other incentives to induce them to change jobs. Underemployment ranged from 17.5 percent for Jackson County to 27.3 percent for Limestone. Madison County has the largest available labor and Lawrence has the smallest.

Table 2.5 Available Labor in WIAA Region 2

	<u>Region 2</u>	<u>Blount</u>	<u>Cullman</u>	<u>DeKalb</u>	<u>Jackson</u>	<u>Lawrence</u>	<u>Limestone</u>	<u>Madison</u>	<u>Marshall</u>	<u>Morgan</u>
Labor Force	433,202	26,205	38,143	31,880	27,048	16,203	35,471	160,371	41,905	55,976
Employed	416,941	25,362	36,740	30,465	25,793	15,357	33,940	155,279	40,387	53,618
Underemployment rate	21.7%	20.3%	27.1%	18.0%	17.5%	26.6%	27.3%	27.1%	18.7%	23.8%
Underemployed workers	90,476	5,148	9,957	5,484	4,514	4,085	9,266	42,081	7,552	12,761
Unemployed	16,261	843	1,403	1,415	1,255	846	1,531	5,092	1,518	2,358
Available labor pool	106,737	5,991	11,360	6,899	5,769	4,931	10,797	47,173	9,070	15,119

Note: Rounding errors may be present. Based on August 2005 labor force data and 2004 underemployment rates.

Source: Center for Business and Economic Research, The University of Alabama and Alabama Department of Industrial Relations.

Workforce Demand

Industry Mix

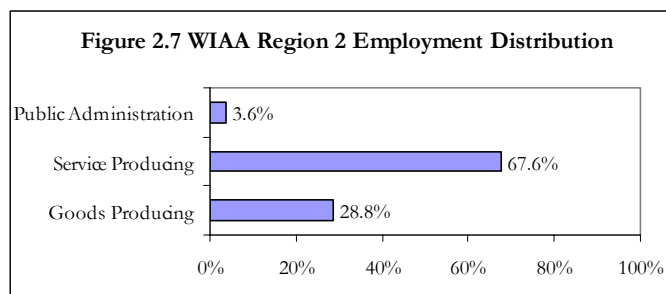
The manufacturing sector was the leading employer with about 79,700 jobs in the second quarter of 2004 (Table 2.6). Rounding up the top five industries by employment are retail trade; health care and social assistance; professional, scientific, and technical services; and accommodation and food services. These five industries provided 211,670 jobs, 63 percent of the region total. The average monthly wage across all industries in the region was \$2,785; two of the leading employers paid more than this average. The highest average monthly wages were for professional, scientific, and technical services (\$4,927) and wholesale trade (\$3,644). Accommodation and food services paid the least at \$1,127. Professional, scientific, and technical services also had the highest average monthly new hire wages with \$3,860, followed by finance and insurance with \$2,607. Accommodation and food services paid the least again with \$798.

Table 2.6 Industry Mix (2nd Quarter 2004)

Industry by 2-digit NAICS Code	Total Employment	Share	Rank	Average Monthly Wage	Average Monthly New Hire Earnings
11 Agriculture, Forestry, Fishing and Hunting	1,792	0.53%	18	\$2,472	\$1,513
21 Mining	455	0.14%	20	\$3,399	\$2,583
22 Utilities	2,250	0.67%	17	\$3,330	\$1,980
23 Construction	14,886	4.43%	8	\$2,709	\$2,342
31-33 Manufacturing	79,726	23.70%	1	\$3,428	\$2,309
42 Wholesale Trade	12,313	3.66%	9	\$3,644	\$2,603
44-45 Retail Trade	45,405	13.50%	2	\$1,917	\$1,281
48-49 Transportation and Warehousing	9,294	2.76%	11	\$2,541	\$2,114
51 Information	4,312	1.28%	14	\$3,346	\$2,195
52 Finance and Insurance	7,775	2.31%	12	\$3,300	\$2,607
53 Real Estate and Rental and Leasing	3,849	1.14%	15	\$2,226	\$1,570
54 Professional, Scientific, and Technical Services	28,374	8.44%	4	\$4,927	\$3,860
55 Management of Companies and Enterprises	1,055	0.31%	19	\$2,860	\$1,758
56 Administrative and Support and Waste Management and Remediation Services	18,492	5.50%	7	\$1,991	\$1,449
61 Educational Services	25,661	7.63%	6	\$2,438	\$1,065
62 Health Care and Social Assistance	32,160	9.56%	3	\$2,652	\$1,753
71 Arts, Entertainment, and Recreation	2,993	0.89%	16	\$1,302	\$787
72 Accommodation and Food Services	26,007	7.73%	5	\$1,127	\$798
81 Other Services (except Public Administration)	7,263	2.16%	13	\$2,001	\$1,533
92 Public Administration	12,267	3.65%	10	\$2,473	\$1,415
ALL INDUSTRIES	336,329	100.00%		\$2,785	

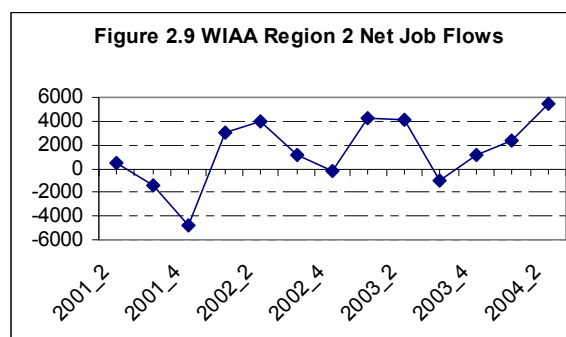
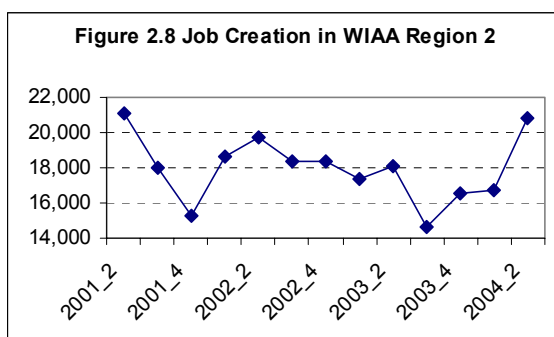
Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

By broad industry classification, service producing industries provided about 68 percent of jobs in second quarter 2004 (Figure 2.7). Goods producing industries were next with 29 percent and public administration nearly 4 percent. This distribution is for all covered jobs in the region.



Job Creation and Net Job Flows

On average, almost 18,000 jobs were created per quarter from second quarter 2001 to second quarter 2004. Figure 2.8 shows job creation on a slightly downward trend over the period, but clearly rising since the third quarter of 2003. Quarterly net job flows averaged 1,426 in the same period (Figure 2.9). Net job flows have ranged from a loss of about 4,800 to a gain of almost 5,500. Job creation refers to the number of new jobs that are created either by new area businesses or through the expansion of existing firms. Net job flows reflect the difference between current and previous employment at all businesses.



Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

High-Demand Occupations

Table 2.7 shows the top 40 of more than 560 occupations ranked by projected demand for jobs. Many of these occupations are common to the top five employment sectors identified earlier: manufacturing; retail trade; health care and social assistance; educational services; and accommodation and food services. Thus these sectors will continue to dominate employment in the region. The top five high-demand occupations are Cashiers; Retail Salespersons; Combined Food Preparation and Serving Workers; Laborers and Freight, Stock, and Material Movers, Hand; and Waiters and Waitresses.

Table 2.7 Selected High-Demand Occupations (Base Year 2002 & Projected Year 2012)

Occupation	Annual Average Job Openings		
	Total	Due to Growth	Due to Separations
Cashiers	710	175	535
Retail Salespersons	660	190	470
Combined Food Preparation and Serving Workers	485	165	320
Laborers and Freight, Stock, and Material Movers, Hand	445	100	345
Waiters and Waitresses	415	100	315
Registered Nurses**	285	165	120
General and Operations Managers	280	115	165
Stock Clerks and Order Fillers	230	5	225
Truck Drivers, Heavy and Tractor-Trailer	230	135	95
Office Clerks, General	230	80	150
Packers and Packagers, Hand**	220	140	80
Janitors and Cleaners, Except Maids	195	90	105
First-Line Supervisors/Managers, Retail Sales	190	90	100
Secretaries, Except Legal, Medical, and Executive	175	30	145
Teacher Assistants	175	95	80
Sales Representatives, Except Technical and Scientific Products	165	80	85
Bookkeeping, Accounting, and Auditing Clerks	165	50	115
Maids and Housekeeping Cleaners	160	90	70
Team Assemblers	160	5	155
Farm, Ranch, and Other Agricultural Managers	145	60	85
Child Care Workers	145	60	85
Elementary School Teachers, Except Special Education	145	75	70
Nursing Aides, Orderlies, and Attendants**	140	90	50
Licensed Practical and Licensed Vocational Nurses	120	60	60
Receptionists and Information Clerks**	120	70	50
Maintenance and Repair Workers, General	120	50	70
Meat, Poultry, and Fish Cutters and Trimmers	120	50	70
Security Guards**	115	65	50
Automotive Service Technicians and Mechanics	115	50	65
First-Line Supervisors/Managers of Office and Administrative Support Workers	110	40	70
Secondary School Teachers, Except Special Education	110	50	60
Customer Service Representatives	105	60	45
Computer Systems Analysts	100	60	40
Tellers	95	25	70
Landscaping and Groundskeeping Workers	95	40	55
First-Line Supervisors/Managers of Production and Operating Workers	90	20	70
Cooks, Institution and Cafeteria	90	35	55
Electricians	85	45	40
Accountants and Auditors	80	30	50
Computer Software Engineers, Applications**	80	65	15

Note: A minimum of 80 average annual job openings is used as selection criterion and data are rounded to nearest 5.

** Qualify as both high-demand and fast-growing occupations.

Source: Alabama Department of Industrial Relations.

Fast-Growing Occupations

The top 42 of occupations ranked by projected growth of employment are listed in Table 2.8. A third of these occupations are in health or health support. The top five fast-growing occupations are Medical Assistants; Medical Records and Health Information Technicians; Home Health Aides; Personal and Home Care Aides; and Network Systems and Data Communications Analysts. Six

occupations are both high-demand and fast-growing: Computer Software Engineers, Applications; Security Guards; Receptionists and Information Clerks; Packers and Packagers, Hand; Nursing Aides, Orderlies, and Attendants; and Registered Nurses.

Table 2.8 Selected Fast-Growing Occupations (Base Year 2002 & Projected Year 2012)

Occupation	Employment		Percent Change	Annual Growth (Percent)	Total Annual Average Job Openings
	2002	2012			
Medical Assistants	430	710	65.1	5.14	40
Medical Records and Health Info. Technicians	340	520	52.9	4.34	25
Home Health Aides	950	1,450	52.6	4.32	60
Personal and Home Care Aides	720	1,080	50.0	4.14	45
Network Systems and Data Communications Analysts	300	440	46.7	3.90	20
Social and Human Service Assistants	500	730	46.0	3.86	35
Dental Hygienists	400	580	45.0	3.79	20
Dental Assistants	570	820	43.9	3.70	40
Pharmacists	560	800	42.9	3.63	35
Computer Software Engineers, Applications**	1,540	2,190	42.2	3.58	80
Physical Therapist Assistants	170	240	41.2	3.51	10
Database Administrators	220	310	40.9	3.49	10
Preschool Teachers, Except Special Ed.	730	1,020	39.7	3.40	40
Fitness Trainers and Aerobics Instructors	240	330	37.5	3.24	15
Directors, Religious Activities and Education	470	640	36.2	3.14	20
Public Relations Managers	360	490	36.1	3.13	20
Computer Software Engineer, Systems Software	1,220	1,660	36.1	3.13	55
Emergency Medical Tech. and Paramedics	490	660	34.7	3.02	20
Anesthesiologists	***	***	***	***	***
Pharmacy Technicians	640	860	34.4	3.00	30
Counter and Rental Clerks	970	1,300	34.0	2.97	70
Security Guards**	1,870	2,500	33.7	2.95	115
Veterinary Assistants and Laboratory Animal Caretakers	210	280	33.3	2.92	10
Vocational Education Teachers, Postsecondary	180	240	33.3	2.92	10
Demonstrators and Product Promoters	180	240	33.3	2.92	10
Receptionists and Information Clerks**	2,110	2,810	33.2	2.91	120
Packers and Packagers, Hand**	4,320	5,730	32.6	2.86	220
Nursing Aides, Orderlies, and Attendants**	2,800	3,710	32.5	2.85	140
Computer Support Specialists	1,310	1,730	32.1	2.82	55
Internists, General	220	290	31.8	2.80	10
MFG. Building and Mobile Home Installers	***	***	***	***	***
Medical Transcriptionists	190	250	31.6	2.78	10
Choreographers	160	210	31.3	2.76	15
Network and Computer Sys. Administrators	480	630	31.3	2.76	20
Sales Engineers	130	170	30.8	2.72	10
Child, Family, and School Social Workers	300	390	30.0	2.66	15
Sales Managers	780	1,010	29.5	2.62	40
Cardiovascular Technologists and Technicians	170	220	29.4	2.61	10
Legal Secretaries	410	530	29.3	2.60	20
Production, Planning, and Expediting Clerks	1,040	1,340	28.8	2.57	55
Registered Nurses**	5,740	7,380	28.6	2.54	285
Special Education Teachers, Middle School	140	180	28.6	2.54	10

Note: Selection criteria are annual growth rate of at least 2.50 percent and a minimum of 10 average annual job openings. Employment level data are rounded to the nearest 10 and job openings data are rounded to the nearest 5.

** Qualify as both high-demand and fast-growing occupations.

*** The data for these occupations are confidential using Bureau of Labor Statistics standards.

Source: Alabama Department of Industrial Relations.

High-Earning Occupations

Any discussion of earnings must consider that wages vary with experience. Occupations with the highest entry wages may not necessarily have the highest average or experienced wages. Table 2.9 shows 50 selected highest earning occupations in the region. The selected high-earning occupations are mainly in health, legal, management, engineering, computer, science, and postsecondary education fields. The top four are health occupations. The selected high-earning occupations are generally not fast-growing or high-demand. One occupation, General and Operations Managers, is both high-earning and high-demand. Three occupations are both high-earning and fast-growing: Sales Managers; Pharmacists; and Internists, General. Computer Software Engineers, Applications is the one occupation that is in high-demand, fast-growing, and high-earning.

Other Workforce Issues

Available Labor

The availability of labor is critical to economic development. WIAA Region 2 currently has a low unemployment rate, but it also has a 106,700-strong available labor pool that is looking for better jobs, typically higher-wage ones. This pool is made up of 90,470 underemployed and 16,260 unemployed. The region's underemployed workers are willing to commute farther and longer; 39 percent are prepared for 20 or more minutes longer and also for 20 or more extra miles.

A lack of job opportunities in their areas and low wages at the available jobs are the primary reasons given for being underemployed. Retirement and disability are the primary reasons given for not working. Some nonworkers may become part of the labor force if their problems can be addressed. Economic development efforts should take these factors into consideration.

Employment is growing faster than the labor force. Higher employment demand could be alleviated somewhat with in-commuting. However, the availability of jobs in the region presents communities with opportunities to attract new residents. Some communities must be prepared to invest in amenities and infrastructure to support such growth because immigration is generally more beneficial to communities than in-commuting.

Immigration is one way of growing the labor force through growth in the population. The region's population growth rate is higher than the state's rate and this is expected to continue through 2010. Another strategy to expand the labor force is to focus on hard-to-serve populations, which include persons in poverty, those receiving welfare, those in sparsely populated areas, those on active parole, and out-of-school youth. These people are often outside of the mainstream economy and poor. They usually have difficulty finding work because they have low levels of educational attainment, lack occupational skills, or face geographic or other barriers. Some investment in training, transportation, child care, infrastructure, etc. may be needed to tap these potential workers. This strategy will increase labor force participation and may be very effective given the region's low population growth rate.

Table 2.9 Selected High-Earning Occupations

Occupation	Mean Annual Salary (\$)
Internists, General	169,749
Family and General Practitioners	146,370
Pediatricians, General	144,581
Psychiatrists	137,197
Chief Executives	135,304
Dentists, General	134,410
Law Teachers, Postsecondary	111,970
Lawyers	106,933
Administrative Law Judges, Adjudicators, and Hearing Officers	103,563
Engineering Managers	96,200
Physicists	93,974
Computer and Information Scientists, Research	90,459
Natural Sciences Managers	88,795
Personal Financial Advisors	88,046
General and Operations Managers	85,821
Mathematicians	83,366
Pharmacists	83,075
Chiropractors	82,514
Optometrists	81,806
Real Estate Brokers	81,723
Computer and Information Systems Managers	81,078
Health Specialties Teachers, Postsecondary	80,930
Marketing Managers	79,435
Computer Hardware Engineers	79,414
Sales Managers	78,957
Electronics Engineers, Except Computer	78,686
Securities, Commodities, and Financial Services Sales Agents	78,458
Environmental Engineers	76,960
Computer Software Engineers, Systems Software	76,794
Chemical Engineers	76,502
Materials Scientists	76,128
Financial Managers	76,003
Airline Pilots, Copilots, and Flight Engineers	74,870
Materials Engineers	73,382
Atmospheric and Space Scientists	73,008
Medical and Health Services Managers	72,925
Electrical Engineers	72,904
Purchasing Managers	72,488
Engineering Teachers, Postsecondary	72,320
Computer Software Engineers, Applications	71,698
Mechanical Engineers	70,221
Education Administrators, Postsecondary	69,618
Industrial Production Managers	69,056
Management Analysts	68,806
Veterinarians	68,619
Construction Managers	67,163
Sales Engineers	66,934
Computer Programmers	66,789
Operations Research Analysts	66,518
Physics Teachers, Postsecondary	65,710

Note: The list of occupations is specific to the region, but earnings are statewide. Only the 50 highest earning single occupations are presented. The list does not include occupations that are affected by confidentiality. Some high-earning occupational groups are not listed because earnings can vary considerably for occupations within these groups. Employment data are rounded to the nearest 10. The data provided are based on the November 2004 release of the Occupational Employment Statistics (OES) combined employment and wage file. Estimates for specific occupations may include imputed data.

"NA" indicates data items that are not publishable or not available.

Source: Center for Business and Economic Research, The University of Alabama and Alabama Department of Industrial Relations.

Skills

Jobs require skill sets and it is necessary that jobholders have the relevant skills. High earning occupations typically require more complex skills, which are obtained in the pursuit of the high educational attainment levels that such jobs require. Low earning occupations require fewer and more basic skill sets; some such occupations have no minimum skill set requirements (e.g. dishwashers and maids).

Table 2.10 shows the percentage of selected occupations in WIAA Region 2 that list a particular skill as primary. We define a primary skill as one in the top 10 of the required skill set for an occupation. O*NET Online provides skill sets for all occupations ranked by the degree of importance. Thus primary skills are more important than other skills. It is important to note that a particular skill may be more important and more extensively used in one occupation than another. Table 2.10 does not address such cross-occupational skill importance comparisons.

In general, basic skills are most frequently listed as primary. Science and critical thinking skills are primary for more selected high-earning occupations than selected fast-growing and selected high-demand occupations. A similar pattern holds for complex problem solving and systems skills, which require longer training periods and postsecondary education. The high-demand and high-growth occupations in the region are dominated by occupations such as Cashiers; Retail Salespersons; Combined Food Preparation and Serving Workers; Waiters and Waitresses; Home Health Aides; and Medical Assistants. The most relevant skills for such occupations are active listening, reading comprehension, speaking, writing, and service orientation.

Education and Training Issues

Educational attainment in WIAA Region 2 is just slightly better compared to the state as a whole. Seventy-six percent of residents age 25 and over have graduated from high school, compared to 75 percent for Alabama. Of that population, almost 20 percent have bachelor's or higher degree; 19 percent of Alabamians do. Madison County stands out with 85 percent high school graduates and 34 percent bachelor's or higher degree holders. All the other counties have lower educational attainment levels than the state except Morgan County, which has comparable levels. Skill and education requirements for jobs keep rising and emphasize a strong need to raise educational attainment in the region.

Table 2.11 shows the number of selected occupations in the region for which a particular education/training category is most common. In general, high-earning occupations require high educational attainment levels, typically a bachelor's or higher degree. Most of the high-demand and fast-growing jobs do not require postsecondary training. Work experience in a related occupation training is the minimum requirement for most fast-growing jobs. Some form of on-the-job training is the minimum requirement for most high-demand occupations. The challenge for the region is that future jobs are likely to require some postsecondary education and training.

The finding that basic skills are important for all the selected occupations (Table 2.10) presents a challenge for workforce development in the region. It indicates a strong need for training in these skills. Ideally, all high school graduates should possess basic skills so that postsecondary and higher education can focus on other and more complex skill types while enhancing basic skills. Employers

should be an integral part of planning for training as they can point out the skill needs of the future and any existing gaps.

Table 2.10 Share of Selected Occupations for Which Skill Is Primary

	Selected High-Demand Occupations	Selected Fast-Growing Occupations	Selected High-Earning Occupations
Basic Skills			
Active Learning	38%	62%	74%
Active Listening	73%	90%	80%
Critical Thinking	60%	71%	94%
Learning Strategies	28%	36%	14%
Mathematics	25%	17%	46%
Monitoring	40%	36%	22%
Reading Comprehension	73%	95%	92%
Science	3%	5%	40%
Speaking	63%	83%	66%
Writing	38%	55%	46%
Complex Problem Solving Skills			
Complex Problem Solving	8%	17%	44%
Resource Management Skills			
Management of Financial Resources	5%	0%	14%
Management of Material Resources	5%	2%	2%
Management of Personnel Resources	13%	0%	8%
Time Management	50%	55%	42%
Social Skills			
Coordination	30%	43%	30%
Instructing	28%	52%	20%
Negotiation	8%	2%	16%
Persuasion	5%	10%	16%
Service Orientation	35%	48%	12%
Social Perceptiveness	43%	57%	12%
Systems Skills			
Judgment and Decision Making	25%	21%	70%
Systems Analysis	3%	5%	14%
Systems Evaluation	3%	2%	20%
Technical Skills			
Equipment Maintenance	10%	7%	0%
Equipment Selection	13%	14%	6%
Installation	10%	7%	0%
Operation and Control	5%	5%	2%
Operation Monitoring	5%	2%	2%
Operations Analysis	3%	10%	24%
Programming	3%	5%	8%
Quality Control Analysis	3%	2%	2%
Repairing	10%	2%	0%
Technology Design	3%	5%	12%
Troubleshooting	15%	17%	14%
Note: Definitions for skill types and skills are available at http://online.onetcenter.org/skills/			
Source: O*NET Online and Center for Business and Economic Research, The University of Alabama.			

Table 2.11 Number of Selected Occupations with Most Common Education/Training Requirement

Most Common Education/Training Requirements Categories	Selected High-Demand Occupations	Selected Fast-Growing Occupations	Selected High-Earning Occupations
First Professional Degree		3	11
Doctoral Degree			4
Master's Degree			3
Work Experience Plus a Bachelor's or Higher Degree	2	2	13
Bachelor's Degree	5	9	18
Associate Degree	1	6	
Postsecondary Vocational Training	2	5	
Work Experience in a Related Occupation	3	2	1
Long-term On-the-job Training	1		
Moderate On-the-job Training	8	6	
Short-term On-the-job Training	18	9	

Note: The last three education and training requirements categories are based on the length of time it generally takes an average worker to achieve proficiency for occupations in which postsecondary training is usually not needed for entry. **Long-term** requires more than 12 months on-the-job training that can include up to four years of apprenticeship, formal classroom instruction, and short-term employer-sponsored training. Trainees are generally considered to be employed in the occupation. **Moderate-term** requires one to 12 months on-the-job experience and informal training. **Short-term** requires up to one month on-the-job experience and training.

Source: O*NET Online; Center for Business and Economic Research, The University of Alabama; and Alabama Department of Industrial Relations.

High-earning occupations make up a small component of total employment and jobs offered by top employers in the region. Diversifying the region's economy would strengthen it. Economic development should also focus on retaining, expanding, and attracting businesses that provide more high-earning jobs. Workforce development should pay attention to postsecondary and higher educational systems to ensure a ready and available workforce for these businesses. The higher incomes to graduates of these institutions would help raise personal income for the region. Raising personal income by improving educational attainment and technological skills is an effective economic development strategy.

A highly educated and productive workforce is a critical economic development asset. Together, workforce development and economic development can provide this asset and build a strong well-diversified regional economy. Indeed, one cannot achieve success without the other.

Regional Advisory Council Annual Report: Implications for Action

The material in this section is from the July 2005 Annual Report of the Region 2 Workforce Development Regional Advisory Council. It does not necessarily reflect the opinions of the direct contributors to this workforce report.

Action issue 1. Where must education and training opportunities be advanced or marketed to meet the demands of critical skills/worker shortages and high-growth occupations in the region?

Region II must continue to ensure that training programs and educational programs are current, up-to-date and adaptable to the needs of existing businesses and industries. This training must also fit the needs of growing companies, changing technologies and new companies that locate in the region. A comprehensive program of career advising/career focus such as was provided under the School-To-Career model, needs to be implemented to ensure that students (potential employees) are aware

of the importance of training to enter the workforce and are aware of all career opportunities available. A targeted marketing program is needed to reach students, parents, educators, and business and industry regarding the critical importance, and the potential for the future, of career/technical education. A key goal of the marketing effort should be a partnership that engages all these entities (from student to parent to employer) as active shareholders in workforce development. Specifically, programs need to be maintained or created to fit the areas of growth and the critical skill needs identified above: industrial manufacturing, healthcare (RNs, LPNs, CNAs, and respiratory therapists), production, engineering, welding, and construction. Emerging skills in the automotive, aerospace and defense industries, and industrial maintenance must also be addressed. Targeted areas of employment for the region are aerospace/defense, electronics, research and development technology, manufacturing, life sciences, health care, and construction.

Action issue 2. How can/should worker skills be generally upgraded in the region?

Region II must continue to leverage the assets located here—community colleges and career centers—to focus on technical skills, soft skills, and work readiness skills. The shortage of guidance counselors must be addressed and the role of counselors redirected in order to focus on advising students about educational choices and careers. The partnership between business, industry and education must be strengthened and made more effective; training programs must be made more accessible to underprivileged youth and workers and WIA Individual Training Accounts (ITAs) refinanced; and the guidelines for WIA eligibility need to be less focused in order to provide greater participation in WIA programs. Among the existing workforce there should be a focus on quality systems such as ISO 9000 and ongoing employee education and skills training and upgrading. In counties such as Marshall, Jackson, and DeKalb where there have been losses of thousands of low-skilled jobs, workers need to be retrained to meet the production and technology jobs available in other parts of the region. A board with representation from all parties should be established to assure stringent goals are met and everyone is accountable. *At this time, Region II CareerLinks are allocated a total of only 21 Youth ITAs for the year. A total of only 120 short-term and 475 long-term ITAs are available for Dislocated Workers for the entire 65-county WIA area. No new adult ITAs are allocated at this time. Region II believes the State should work with the Department of Labor to restore funding to these programs at a level that will make them effective once more. In addition, funding should be provided to the CareerLinks within the region to administer meaningful career and skill assessments and interest inventories to adult members of the workforce population. Region II is requesting approximately \$20,000 to assist Career Centers with assessment programs.*

Action issue 3. How can future workers be helped to make better choices about career preparation?

The focus of education at all levels needs to be on learning and not on exit exams and math and science education should be paramount to meet the skills needed in the workforce of today and the future. Effective, valid career interest inventories, career surveys, and personality profiles should be available and administered to students beginning in elementary school to ensure that their education is a true career pathway. Career interest, awareness, and assessment programs must be integrated from Kindergarten through 12th grade, including out of school youth, and must include adult education and adults in transition as well. Business must be more willing to provide mentors, job-shadowing, and apprenticeships for students and educator-in-the workplace experiences for educators. State and federal legislation addressing youth labor laws need to be addressed. The 4x4 program and course of study adopted by the State Department of Education needs to be reassessed to determine if it truly meets the needs of the majority of students and business and industry.

CareerLinks personnel should have hands-on, real time knowledge of the present and future needs of the workforce. *Effective LAUNCH and School-To-Career programs will address many of these issues at the K-12 level and effective CareerLinks utilizing aforementioned assessments, staff development, and a reanalysis of what success really means for the workforce will address these issues among the adult population. Region II believes many of the issues with the CareerLinks could be addressed by moving the CareerLinks to the community college campuses.*

Action issue 4. Should worker assessment and credentialing be increased in the region (pre-service and in-service training)?

Yes. Programs that should be available and funded are WorkKeys or similar assessment programs, incumbent worker training programs, Focused Industry Training (FIT) or similar programs, Alabama Industrial Development Training, employment screening, and career readiness programs. Career centers need to be operating efficiently and adequately funded in order to ensure equal accessibility to people in all parts of the region.

Critical Gaps: The need for a comprehensive in-school career programs at all grade levels such as that provided by the School-To-Career; the need for an Out-of-School Youth (OSY) program for Blount, Cullman, DeKalb, Limestone, and Morgan counties modeled on successful programs such as LAUNCH; programs to address language and cultural barriers particularly in counties such as Marshall, DeKalb, and Blount; and efforts need to be made regionally to partner with temporary employment agencies to provide adequately skilled temporary workers to employers within the region. Faith-based organizations need to be involved in all of the OSY programs. There should be a stringent level of accountability at all levels of workforce development and more and more effective short-term training programs need to be developed. *The LAUNCH program needs to be expanded to implement OSY programs in the five counties currently not served and Region II is requesting \$500,000 for expansion of this program. There is strong support for faith-based issues within Region II and we request \$30,000 in seed money to further coordinate faith-based workforce initiatives as required by the state.*

Action issue 5. What roles should be played by the various stakeholder groups (employers, partner agencies, elected officials, faith-based/ community-based organizations, Workforce Investment Board members, grantor agencies, news media, vendors/ contractors) at the local, regional, state and federal levels in implementing the action steps outlined above?

Employers need to adequately communicate their training needs to training providers, participate in the development and implementation of training programs and follow-through with commitments to provide workplace training opportunities and hire workers that complete the programs. Entities within the region must work more closely with the state and better communicate workforce development needs. There must also be closer cooperation between chambers of commerce, economic development agencies, elected officials, community colleges, and other stakeholders in workforce development within Region II. The Advisory Council should play a key role in developing these partnerships and securing this cooperation. At the state and regional levels marketing efforts must be timely and up-to-date and greater efforts need to be made by both state and regional officials to define and facilitate the role of faith-based organizations in workforce development. The State should also enforce standards of program communication and customer service among Career Centers in the region and throughout the state. Efforts need to be made at the State level to address personnel and policy issues that are preventing One Stops from operating effectively, efficiently, and consistently within our region and throughout the state. The state also

needs to ensure that GED and Adult Education programs remain adequately funded to meet present and future demands. *Region II is requesting funding and support for a comprehensive in school program modeled after School-To-Career. Such a program includes activities such as CHOICES, WorkKeys Testing, Educators in the Workplace, Junior Achievement, job shadowing, industry tours, career fairs, and funding for innovative career technical software in the classroom and requires a budget of approximately \$1.5 million per year.*